

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

### REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

MAR 3 1 2015

REPLY TO THE ATTENTION OF:

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Steve Pittman, General Manager North Manchester Ethanol, LLC D/b/a/ POET Biorefining – North Manchester 868 East 800 North North Manchester, Indiana 46962

Re: Notice and Finding of Violation

POET Biorefining - North Manchester

North Manchester, Indiana

Dear Mr. Pittman:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to North Manchester Ethanol, LLC, d/b/a POET Biorefining - North Manchester (POET-North Manchester or you) under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a). We find that you are violating the Indiana State Implementation Plan at your North Manchester. Indiana facility.

Section 113 of the Clean Air Act, 42 U.S.C. § 7413(a), gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV/FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Manoj P. Patel. You may call him at (312) 353-3565 or e-mail him at <u>patel.manojkumar@epa.gov</u> to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

George T. Czerniak

Director -

Air and Radiation Division

Enclosure

cc: Phil Perry, Branch Chief

Office of Air Quality/Compliance & Enforcement Branch

Indiana Department of Environmental Management

100 North Senate Avenue Indianapolis, Indiana 46204

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)
North Manchester Ethanol, LLC	) NOTICE OF VIOLATION an
d/b/a/ POET Biorefining – North	) FINDING OF VIOLATION
Manchester	·
North Manchester, Indiana	)
	) EPA-5-15-IN-05
Proceedings Pursuant to	)
the Clean Air Act	)
42 U.S.C. § 7401 et seg.	)

#### NOTICE AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation and Finding of Violation (NOV/FOV or Notice) under Section 113(a) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a). The authority to issue this NOV/FOV has been delegated to the Regional Administrator of EPA Region 5 and redelegated to the Director, Air and Radiation Division. EPA finds that North Manchester Ethanol, LLC, d/b/a POET Biorefining-North Manchester (POET-North Manchester) has violated the Indiana State Implementation Plan (SIP), as follows:

# Statutory and Regulatory Background

- 1. Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to EPA an operating permit program (Title V Permit Program). On December 4, 2001, 66 Fed. Reg. 62969, EPA granted Indiana final approval of its Title V Permit Program, effective November 30, 2001.
- 2. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b), provide that, after the effective date of any permit program approved or promulgated under Title V of the Act, no source subject to Title V may operate except in compliance with a Title V permit.
- 3. 40 C.F.R. § 70.3 provides that the requirements of Part 70 apply to any major source located in a state that has received whole or partial approval of its Title V program.
- 4. On February 20, 2008, 73 Fed. Reg. 9201-9203, EPA approved 326 LAC 8-5-6, fuel grade ethanol production at dry mills, to its volatile organic compounds (VOC) rules as a revision to the Indiana SIP at 40 C.F.R. § 52.770(c)(182).
- 5. 326 LAC 8-5-6(c)(1) states that the owner or operator of a fuel grade dry mill ethanol production plant shall install and operate a thermal oxidizer with an overall control

- efficiency of not less than 98% percent or resulting in a VOC concentration of not more than 10 parts per million (ppm).
- 6. 326 IAC 8-5-6(e)(1) provides that the owner or operator of a fuel grade ethanol dry mill production plant that was constructed or modified after April 1, 2007, that installs and operates a thermal oxidizer as its VOC control device, shall measure the three (3) hour average operating temperature of the oxidizer using a continuous temperature monitor. The 3-hour average temperature must be greater than or equal to the minimum operating temperature established during the plant's most recent compliance demonstration.
- 7. 326 LAC 8-5-6(e)(2) provides the owner or operator of a fuel grade ethanol dry mill production plant that was constructed or modified after April 1, 2007, that installs and operates the wet scrubber as its VOC control device, shall monitor the flow rate at least once per day. The scrubber flow rate must be greater than the minimum flow rate established during the plant's most recent compliance demonstration.
- 8. On August, 2012, the Indiana Department of Environmental Management (IDEM) issued POET-North Manchester Title V Operating Permit No. T169-31191-00068. IDEM approved a significant permit modification to the Title V permit on December 13, 2013.
- 9. Part D.2.2(b) of the Title V Permit states that the overall efficiency for the scrubber CE008 and thermal oxidizer CE009 (including the capture and destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmy.
- 10. Part D.2.2.(c) of the Title V Permit states that the overall efficiency for the scrubber (including the capture efficiency and the destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 20 ppmv.
- Part D.2.2(e) of the Title V Permit states that the overall efficiency for the regenerative thermal oxidizer CE009 controlling DDGS dryers (EU025 and EU026) (including the capture efficiency and the destruction efficiency) shall be at least 98%, or the VOC outlet concentration shall not exceed 10 ppmv.
- 12. Part D.2.1(c) of the Title V permit limits VOC emissions when RTO CE009 is not operating to 81.43 lbs/hour from scrubber CE008 which controls emissions from the fermenter and distillation processes.
- 13. Part B.24 of the Title V permit and 40 C.F.R. § 52.12 provide that, for the purpose of establishing whether or not a person has violated or in violation of any provision or condition of a permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed.
- 14. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), authorizes the Administrator to initiate an enforcement action whenever, among other things, the Administrator finds that

any person has violated or is in violation of a requirement or prohibition of Title V of the Act, or any rule promulgated, issued or approved under Title V of the Act.

# Factual Background

- 15. POET-North Manchester owns and operates a fuel grade ethanol production dry mill facility at 868 East 800 North, North Manchester, Indiana (the facility).
- 16. The facility includes: two (2) natural gas fired dried distillers grains with solubles dryers, identified as EU025 and EU026, with emissions venting to RTO CE009 and exhausting to stack SV009; one (1) fermentation process containing five (5) fermenters, identified as EU012 through EU016; one (1) yeast propagation tank, identified as EU017; one (1) beer well, identified as EU018, with emissions controlled by scrubber CE008 and RTO CE009, with emissions exhausting to SV009; one (1) distillation process containing one (1) beer stripper, identified as EU019, one (1) rectifier column, identified as EU020, one (1) side stripper, identified as EU021, one (1) set of three molecular sieves, identified as EU022, one (1) set of four (4) evaporators, identified as EU023, emissions are controlled by scrubber CE008 and RTO CE009, with emissions exhausting to SV009; one (1) set of four (4) centrifuges, identified as EU024, emissions controlled by RTO CE009, with emissions exhausting to SV009. During the RTO downtime, all emissions are exhausted to the RTO bypass stack SV008.
- 17. On December 20, 2013, EPA issued a Request for Information under Section 114 of the Act, 42 U.S.C. § 7414 to the POET-North Manchester facility.
- 18. On February 27 and March 27, 2014, POET North Manchester responded to EPA's Request for Information.
- 19. On March 3, 2009, RTO CE009 achieved the 3-hour average temperature of 1652<sup>0</sup> F during a compliance stack test. On September 24, 2013, RTO CE009 achieved the 3-hour average temperature of 1636<sup>0</sup> F during a compliance stack test.
- 20. From August 20 through August 22, 2013, POET North Manchester performed several stack tests on its RTO CE009 and scrubber CE008.
- 21. The August 20, 2013 stack test (10:00 AM 13:00 PM) results indicated that at RTO CE009, the facility had an overall VOC control efficiency of 96.38%, and demonstrated a VOC concentration of 13.7ppmv.
- 22. The August 20, 2013 test (13:00 PM 16:00 PM) results indicated that at RTO CE009, the facility had an overall VOC control efficiency of 97.42%, and demonstrated a VOC concentration of 10.80 ppmv.
- 23. The August 21, 2013 test (10:06 AM 13:06 PM) results indicated that at RTO CE009, the facility had an overall VOC control efficiency of 97.58%, and demonstrated a VOC concentration of 12.70 ppmv.

- 24. The August 22, 2013 test (13:30 PM 18:40 PM) results indicated that at Scrubber CE008, the facility had an overall VOC control efficiency of 93.53%, and demonstrated a VOC concentration of 759.90 ppmv. The August 22, 2013 test results indicated that at Scrubber CE008, the facility emitted 110.39 lbs. VOC/hr.
- 25. POET-North Manchester submitted combustion chamber temperature records for RTO CE009.

#### **Violations**

- 26. The August 20, 2013, August 21, 2013, and August 22, 2013, stack test results demonstrate that at RTO CE009, the facility did not achieve a VOC control efficiency of 98%, as required by Title V Permit No. T169-31191-00068, Emission Limit D.2.2, which constitutes violation of the Indiana SIP, Section 502(a) of the Act, 42 U.S.C. § 7661(a), and 40 C.F.R. § 70.7(b).
- 27. The August 22, 2013, stack test results demonstrate that at Scrubber CE008, the facility emitted VOCs in excess of the permitted limit of 81.43 lbs/hr as required by Title V Permit No. T169-31191-00068, Emission Limit D.2.1(c)(2), which constitutes a violation of the Indiana SIP, Section 502(a) of the Act, 42 U.S.C. § 7661(a), and 40 C.F.R. § 70.7(b).
- 28. From January 5, 2010 through December 27, 2013, POET-North Manchester operated RTO CE009 below the required 3-hour average temperature as specified in Title V Permit No. T169-31191-00068, Emission Limit of D.2.10(c), which constitutes a violation of the Indiana SIP, Section 502(a) of the Act, 42 U.S.C. § 7661(a), and 40 C.F.R. § 70.7(b).

#### **Environmental Impact of Violations**

29. VOC pollution causes a variety of health and environmental impacts, such as acid rain, global warming, water quality deterioration, and visual impairment. VOC plays a major role in the atmospheric reactions that produce ozone. Breathing ozone contributes to a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground level ozone also can reduce lung function and inflame lung tissue. Repeated exposure may permanently scar lung tissue.

- 3/71/15 \_\_\_\_\_

George T. Czerniak

Director

Air and Radiation Division

### CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-15-IN-05, by Certified Mail, Return Receipt Requested, to:

Steve Pittman, General Manager North Manchester Ethanol, LLC d/b/a/ POET Biorefining – North Manchester 13179 North 100 East North Manchester, Indiana 46001

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first-class mail to:

Phil Perry, Chief
Compliance and Enforcement Branch
Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, Room IGCN 1003
Indianapolis, Indiana 46206-6015

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On the O/	'day of	March		2015.

Loretta Shaffer Program Technician AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER:

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